Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Global Stone Chemstone Corporation
Facility Name:	Global Stone Chemstone Corporation
Facility Location:	P.O. Box 219 508 Quarry Lane Clear Brook, Virginia 22624
Registration Number:	80504
Permit Number:	VRO80504

November 30, 2001
Effective Date

March 14, 2003
Minor Modification Date

March 10, 2005
Significant Modification Date

November 30, 2006
Expiration Date

R. Bradley Chewning
for Director, Department of Environmental Quality

March 10, 2005
Signature Date

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I. Facility Information

Permittee
Global Stone Chemstone Corporation
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Responsible Official
Spencer Stinson
General Manager

Facility
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P. O. Box 219
508 Quarry Lane
Clear Brook, Virginia 22624

Contact Person
Karl Everett
Environmental Health & Safety Manager
(540) 465-5161

NET Identification Number: 51-069-0034

Facility Description: SIC Code 3274 – Lime

Global Stone Chemstone Corporation owns and operates a limestone quarry, limestone products plant, and lime manufacturing facility located at 508 Quarry Lane off of Highway 672 in Clear Brook, Virginia. This facility was previously owned and operated by W.S. Frey Company. The basic processes at this facility in Frederick County are: (1) quarrying raw limestone, (2) preparing limestone for the kiln by crushing and sizing, (3) calcining the limestone through a rotary lime kiln and (4) miscellaneous crushing, transfer, storage, handling and loadout operations for the lime manufactured.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Precalcination Processes (Main Plant)							
MP-CR-1	-	Primary Crusher (1961) Jaw Crusher – 42" x 48"	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-SC-1	-	Screening (1961) No. 1 Screen – Tyler F-900	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-CR-2	-	Secondary Crusher (1961) Allis Chalmers 16-50 Gyratory Crusher	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-SC-2	-	Screening (1961) No. 2 Screen – Tyler F-800	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-SC-3	-	Screening (1961) No. 3 Screen – Tyler F-800	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-BC	-	Material Conveyance Conveyor No.: 2, 3, 4, 7, 8, 9, 11, 12, and 13 (1961)	500 tons/hr	Wet suppression system	-	PM PM-10	NA
MP-BC-14	-	Material Conveyance Hoover Belt Conveyor – 24" x 200' (2003)	150 tons/hr	Wet suppression system	-	PM PM-10	1/22/03

*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
MP-SB	-	Eight Storage Bins (1961)	(4) 60 ton bins (4) 40 ton bins	Wet suppression system	-	PM PM-10	NA
Rotary Kiln System							
LP-RK-1	LP-EP-1	F. L. Smidth Rotary Lime Kiln (350' long) Constructed in April 1996, capable of being fired by coal, natural gas, or distillate oil (1998)	41.66 tons/hr limestone feed input	Amerex Industries Baghouse Model RB 14-288-D6 (4 module)	LP-BH-2405, 2406, 2407 and 2408	PM PM-10 SO_2	1/22/03
LP-SC-1	-	Screening (1998) Scalping Screen No. 1	1000 tons/day	-	-	PM PM-10	1/22/03
LP-SC-2	LP-EP-5	Screening (1996) Scalping Screen No. 2	500 tons/day (output)	Amerex Industries Baghouse Model 10.5-110 D4	LP-DC-2533	PM PM-10	1/22/03
LP-SC-3	LP-EP-3	Screening (1996) Scalping Screen No. 3	500 tons/day (output)	Amerex Industries Baghouse Model RP-10.5-81 D4	LP-DC-2525	PM PM-10	1/22/03
LP-CM-1	-	Coal Milling (1996) Bituminous Coal Mill	7 tons/hr	Enclosed Process	-	PM PM-10	1/22/03

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LP-BC-1,2	-	Material Conveyance – Belt Conveyors 1 and 2 (1996)	1000 tons limestone/day (1) 300 tons limestone/day (2)	-	-	PM PM-10	1/22/03
LP-BC-3	LP-EP-4	Material Conveyance – Belt Conveyor #3 (1996)	1000 tons limestone/day	Amerex Industries Baghouse Model RP-10.5-30 D4	LP-DC-2204	PM PM-10	1/22/03
LP-BC-4	LP-EP-5	Material Conveyance – Belt Conveyor # 4 (1996)	500 tons/day (lime)	Amerex Industries Baghouse Model RP-10.5 – 100 D4	LP-DC-2533	PM PM-10	1/22/03
LP-BC-5	LP-EP-5	Material Conveyance – Belt Conveyor # 5 (1996)	500 tons/day (lime)	Amerex Industries Baghouse Model RP-10.5-110 D4	LP-DC-2533	PM PM-10	1/22/03
LP-BC-6	-	Material Conveyance – Belt Conveyor # 6 (1965)	500 tons/day (lime)	-	-	PM PM-10	1/22/03
LP-BC-7	-	Material Conveyance – Belt Conveyor # 7 (1965)	500 tons/day (lime)	-	-	PM PM-10	1/22/03
LP-BC-8	VDC-2	Material Conveyance – Belt Conveyor # 8 (1965)	500 tons/day (lime)	Sly MP403	LS-DC-2	PM PM-10	1/22/03
LP-BC-9	LP-EP-3	Material Conveyance – Belt Conveyor # 9 (1996)	500 tons/day (lime)	Amerex Industries Baghouse Model RP-10.5-81 D4	LP-DC-2525	PM PM-10	1/22/03

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LP-BC-10,10A	LP-EP-8	Material Conveyance (coal) Belt Conveyor # 10 (1996)	150 tons coal/hr	Amerex Industries Baghouse Model RP-10.5-42 D4	LP-DC-2106	PM PM-10	1/22/03
LP-BC-11	LP-EP-6	Material Conveyance (lime) Belt Conveyor # 11 (1996)	500 tons lime/day	Amerex Industries Baghouse Model RP-10.5-49 D4	LP-DC-2532	PM PM-10	1/22/03
LP-BC-12	LP-EP-6 and VDC-1	Material Conveyance (lime) Belt Conveyor # 12 (1996)	500 tons lime/day	Amerex Industries Baghouse Model RP-10.5-81 D4 and Sly STJ 1511-10IP	LP-DC-2341 and LS-DC-1	PM PM-10	1/22/03
LP-BC-14	LP-EP-6	Material Conveyance (lime) Belt Conveyor # 14 (not yet built)	500 tons lime/day	Amerex Industries Baghouse Model RP-10.5-49 D4	LP-DC-2532	PM PM-10	1/22/03
LP-BC-15	LP-EP-6	Material Conveyance (lime) Belt Conveyor # 15 (not yet built)	500 tons lime/day	Amerex Industries Baghouse Model RP-10.5-49 D4	LP-DC-2532	PM PM-10	1/22/03
LP-SW/PC	LP-EP-9	Material Conveyance – Screw Conveyors & Pneumatic Conveyance System Screw Conveyors # 1, 2, 3 and 4 & Pneumatic Conveyance System (1996)	-	Amerex Industries Baghouse Model RV-10.5-20 D4	LP-DC-2425	PM PM-10	1/22/03

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Lime Finishing and Loadout Process							
LP-SB-1 East & West	LP-EP-8	Two lime storage bins (1996)	2-2000 tons each	Loading: Amerex Industries, Baghouse Model RP-10.5-81 D4, Unloading: Amerex Industries Baghouses Model RP-10.5-49 D4 and Amerex Industries Model RP-10.5-49 D4	Loading: LP-DC-2525 Unloading: LP-DC-2532 and LP-DC-2341	PM PM-10	1/22/03
LP-SB-2	LP-EP-9	Kiln Dust Bin (1996)	400 tons	Amerex Industries Model RV-10.5-20 DH	LP-DC-2425	PM PM-10	1/22/03
LP-SB-3 North & South	-	Storage – Lime Bins (1965)	2- 600 tons each	-	-	PM PM-10	1/22/03
LS-C	LP-EP-7	New Lime Loadout Facility (2000) Jeffery Crusher (30 Flextooth) (2000)	50 tph	Amerex Industries Model RP-10.5-49 D4	LL-DC-2532	PM PM-10	1/22/03
LS-S	VDC-1	Midwestern Screen (MEV 510-5) (2000)	150 tph	Sly STF 1511-10IP	LS-DC-1	PM PM-10	1/22/03

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LS-CB-1, 2, and 3	VDC-1	Belt Conveyors (2000)	150 tph	Sly STJ 1511-10IP	LS-DC-1	PM PM-10	1/22/03
LS-SS-2, 3, 4 and 5	VDC-1	Four Storage Silos (2000)	165 tons each	Sly STJ 1511-10IP	LS-DC-1	PM PM-10	1/22/03
LS-CB-4, 5 and 6	VDC-2	Belt Conveyors (2000)	200 tph each	Sly MP403	LS-DC-2	PM PM-10	1/22/03
LS-CB-7	VDC-2	Belt Conveyor (2000)	50 tph	Sly MP403	LS-DC-2	PM PM-10	1/22/03
LS-SS-1	VDC-2	One storage silo (2000)	165 tons	Sly MP403	LS-DC-2	PM PM-10	1/22/03

*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LS-SS-6	VDC-2	One storage silo (2000)	30 tons	Sly MP403	LS-DC-2	PM PM-10	1/22/03
SC-2	VDC-2	Screw conveyor (2000)	150 tph	Sly MP403	LS-DC-2	PM PM-10	1/22/03
LS-1, 2 and 3	VDC-2	Three 12” dia. Bayshore Loadout dust controlling spouts (2000)	200 tph	Sly MP403	LS-DC-2	PM PM-10	1/22/03

*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

III. Process Equipment Requirements – Precalcination Process (Main Plant)

A. Limitations

1. All crushers shall be fitted with liquid sprays or other appropriate systems which effectively limit the escape of airborne dust.
(9 VAC 5-80-110 and 9 VAC 5-40-1840)

2. All feeders, elevators, conveyors, transfer points, discharge points and loading points shall be equipped with collectors, sprays or other means when necessary to minimize the escape of dust.
(9 VAC 5-80-110 and 9 VAC 5-40-1840)

3. Particulate emissions from MP-CR-1, MP-SC-1, MP-CR-2, MP-SC-2, MP-SC-3, MP-BC and MP-SB shall not exceed the process weight limit as determined by the following equation:

$$E = 55.0\ P^{0.11} - 40$$

where:

E = emission rate in lb/hr
P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-1840)

4. Visible emissions from MP-CR-1, MP-SC-1, MP-CR-2, MP-SC-2, MP-SC-3, MP-BC and MP-SB shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and 9 VAC 5-40-1850)

5. Visible emissions from MP-BC-14 shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and Condition 30 of 1/22/03 Permit)

6. Fugitive dust controls shall include the following, or equivalent (as approved by the DEQ), as a minimum:

   a. Dust from drills, shot piles, material handling, screens, crushers, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ). The wet suppression spray systems shall be operated at optimum design.

b. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.

c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have clean wheels – achieved by use of a wheel washer **or** equivalent. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and 9 VAC 5-40-1860)

B. Monitoring and Recordkeeping

1. The wet suppression spray systems shall be equipped with pressure gauges to indicate system operating pressures. The pressure gauges shall be installed with adequate access for inspection.
(9 VAC 5-80-110)

2. For each day of operation the permittee shall perform a daily inspection of the wet suppression spray systems including pumps, pipe system, spray nozzles, and water pressure gauges to ensure proper operation.
(9 VAC 5-80-110)

3. The permittee shall conduct a visible emissions inspection of each piece of equipment included as part of the Precalcination Process (Main Plant) at least once every week of operation. All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. Each observation period shall be a minimum of 1 minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within two hours of the visible emission inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

4. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

a. Annual production of crushed stone from primary crushing from the Jaw Crusher (MP-CR-1), calculated monthly as the sum of each consecutive twelve (12) month period.

b. Daily wet suppression spray systems results including:

(1) The date, time, and name of person performing each inspection;

(2) A list of items inspected;

(3) The pressure gauge reading; and

(4) Any maintenance or repairs performed as a result of these inspections.

c. Weekly visible emissions inspection results for the Precalcination Process (Main Plant) equipment including:

(1) The date, time, and name of person performing each inspection;

(2) Whether or not there were visible emissions;

(3) Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs; and

(4) VEE results.

d. Scheduled and non-scheduled maintenance.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

IV. Process Equipment Requirements – Rotary Kiln System

A. Limitations

1. Particulate emissions from the kiln (LP-RK-1) shall be controlled by a four (4) module fabric filter baghouse (LP-BH2405 – LP-BH2408). The fabric filter baghouse shall be provided with adequate access for inspection and shall be in operation when the rotary kiln is operating.
   (9 VAC 5-80-110 and Condition 3 of 1/22/03 Permit)

2. Particulate emissions from the scalping screen 2 (LP-SC-2), and conveyors 4 and 5 (LP-BC-4 and LP-BC-5) shall be controlled by a fabric filter (LP-DC-2533). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

3. Particulate emissions from the scalping screen 3 (LP-SC-3) and conveyor 9 (LP-BC-9) shall be controlled by a fabric filter (LP-DC-2525). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

4. Particulate emissions from coal conveyors 10 (LP-BC-10) and 10A(LP-BC-10A) shall be controlled by a fabric filter (LP-DC-2106). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

5. Particulate emissions from conveyor 12 (LP-BC-12) shall be controlled by fabric filters (LP-DC-2341 and LS-DC-1). The fabric filters shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

6. Particulate emissions from conveyors 11, 14 and 15 (LP-BC-11, LP-BC-14 and LP-BC-15) shall be controlled by a fabric filter (LP-DC-2532). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

7. Particulate emissions from conveyor 3 (LP-BC-3) shall be controlled by a fabric filter (LP-DC-2204). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

8. Particulate emissions from the screw conveyors 1, 2, and 3 and the pneumatic conveyance system (LP-SW/PC) shall be controlled by a fabric filter (LP-DC-2425). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

9. Particulate emissions from conveyor 8 (LP-BC-8) shall be controlled by a fabric filter (LS-DC-2). The fabric filter shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

10. Particulate emissions from the scalping screen (LP-SC-1), the coal mill (LP-CM-1), and the conveyors 1, 2, 6 and 7 (LP-BC-1, 2, 6 and 7) shall be controlled by liquid sprays or other appropriate systems which effectively limit the escape of airborne dust.
    (9 VAC 5-80-110 and 9 VAC 5-40-260)

11. The permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from the rotary lime kiln (LP-RK-1). The span of this system shall be set at 40 percent opacity.
    (9 VAC 5-80-110, 40 CFR 60.343(a), and Condition 14 of 1/22/03 Permit)

12. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required, the COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
    (9 VAC 5-80-110 and 40 CFR 60.13(e)(1) and Condition 14 of 1/22/03 Permit)

13. The annual production of lime shall not exceed 168,000 tons per year, calculated monthly as the sum of each consecutive 12 month period. This production is limited to a total throughput of 336,000 tons of limestone per year, calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-80-110 and Condition 6 of 1/22/03 Permit)

14. The approved fuels for the lime kiln (LP-RK-1) are coal, natural gas, and distillate oil. Use of a different fuel may require a permit to modify and operate.
    (9 VAC 5-80-110 and Condition 7 of 1/22/03 Permit.)

15. The distillate oil shall meet the specifications below:

    DISTILLATE OIL which meets ASTM D396-78 specifications for numbers 1 or 2 fuel oil:
    Maximum sulfur content per shipment: 0.5%
    (9 VAC 5-80-110 and Condition 8 of 1/22/03 Permit)

16. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the distillate oil was received;

c. The volume of distillate oil delivered in the shipment;

d. A statement that the distillate oil complies with the American Society for Testing and Material specifications D396-78 for numbers 1 or 2 fuel oil, and

e. The sulfur content of the distillate oil.

(9 VAC 5-80-110 and Condition 10 of 1/22/03 Permit)

17. The sulfur and ash content of the coal to be burned in the lime kiln shall not exceed 1.90 percent and 16 percent by weight, respectively, per shipment.
(9 VAC 5-80-110 and Condition 9 of 1/22/03 Permit)

18. Emissions from the operation of the lime kiln (LP-RK-1) shall not exceed the limits specified below:

Particulate Matter	4.8	lbs/hr	19.2	tons/yr
PM-10	4.3	lbs/hr	17.3	tons/yr
Sulfur Dioxide	121.4	lbs/hr	490.1	tons/yr
Nitrogen Oxides (as NO_2)	60.9	lbs/hr	245.7	tons/yr
Carbon Monoxide	15.1	lbs/hr	61.0	tons/yr

The annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-280, 40 CFR 60.342(a)(1) and Conditions 11 and 14 of 1/22/03 Permit)

19. Visible emissions from the lime kiln baghouse stack (LP-EP-1) shall not exceed 5 percent opacity as determined using EPA Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-50-80, 40 CFR 60.342(a)(2) and Conditions 12 and 14 of 1/22/03 Permit)

20. Fugitive visible emissions from the rotary lime kiln (LP-RK-1) shall not exceed ten (10) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-80, 40 CFR 60.11(c) and Condition 13 of 1/22/03 Permit)

21. Visible emissions from the fabric filters (LP-DC-2533, LP-DC-2525, LP-DC-2204, LP-BH-2405 – 2408, LS-DC-2, LP-DC-2106, LP-DC-2341, and LP-DC-2425) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by the EPA Method 9 (Reference 40 CFR 60, Appendix A).

    (9 VAC 5-80-110 and 9 VAC 5-50-80)

22. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9 VAC 5-80-110, 40 CFR 60.11(d) and Condition 43 of 1/22/03 Permit)

23. Fugitive dust controls shall include the following, or equivalent (as approved by the DEQ), as a minimum:

    a. Dust from drills, shot piles, material handling, screens, crushers, mills, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ). The wet suppression spray systems shall be operated at optimum design.

    b. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.

    c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

    d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have clean wheels – achieved by use of a wheel washer **or** equivalent. Dirt, product, or raw

material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, 9 VAC 5-40-1860 and 9 VAC 5-50-90)

24. Particulate emissions from the coal mill (LP-CM-1) shall not exceed the process weight limit as determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = emission rate in lb/hr
P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-260)

25. Particulate emissions from each fabric filter stack (LP-DC-2533, LP-DC-2525, LP-DC-2204, LP-BH-2405 – 2408, LS-DC-2, LP-DC-2106, LP-DC-2341, and LP-DC-2425) shall not exceed the process weight limit as determined by the following equation:

$$E = 55.0\ P^{0.11} - 40$$

where:

E = emission rate in lb/hr
P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-260)

B. Monitoring

1. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filters are operating.
(9 VAC 5-80-110 and Condition 3 of 1/22/03 Permit)

2. For the purpose of conducting a performance test, the permittee shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone fed to the lime kiln (LP-RK-1). The measuring device used must be accurate to within + or - 5 percent of the mass rate over its operating range.
(9 VAC 5-80-110, 40 CRF 60.343(d) and Conditions 5 and 14 of 1/22/03 Permit)

3. The permittee shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the COMS at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B of 40 CFR 60. The system must allow the amount of excess zero and span drift measured at the 24-hour checks to be recorded and quantified, whenever specified. The optical surfaces exposed to effluent gases shall be cleaned prior to performing the zero and span drift adjustments except for that systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
(9 VAC 5-80-110, 40 CFR 60.13(d)(1) and Condition 14 of 1/22/03 Permit)

4. The permittee shall develop procedures including a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures shall provide a system check of the analyzer's internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.
(9 VAC 5-80-110 and 40 CFR 60.13(d)(2) and Condition 14 of 1/22/03 Permit)

5. The permittee shall perform periodic monitoring of the rotary kiln (LP-RK-1) by conducting a weekly inspection of the fabric filter (LP-BH-2405 – 2408). The inspection shall include an observation of the presence of visible emissions and the pressure drop across the fabric filter. If during the inspection visible emissions are observed, timely corrective action shall be initiated within four hours of the visible emissions inspection such that the fabric filter resumes operation and there are no visible emissions from the fabric filter within 24 hours of the initial observation.
(9 VAC 5-80-110)

6. The permittee shall perform a weekly inspection of each fabric filter (LP-DC-2533, LP-DC-2525, LP-DC-2204, LS-DC-2, LP-DC-2106, LP-DC-2341, and LP-DC-2425). Each inspection shall include an observation of the presence of visible emissions and the pressure drop across each fabric filter. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within four hours of the visible emissions inspection such that the fabric filter resumes operation with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

7. The permittee shall conduct a visible emissions inspection of each piece of equipment not controlled by a baghouse (LP-SC-1, LP-CM-1, and LP-BC-1, 2, 6 and 7) at least once every week of operation. All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. Each observation period shall be a minimum of 1 minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is taken within two hours of the visible emission inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

8. For each day of operation, the permittee shall perform a daily inspection of the wet suppression spray systems including pumps, pipe system, spray nozzles, and water pressure gauges to ensure proper operation.
(9 VAC 5-80-110)

9. The permittee shall conduct an annual internal inspection on the lime kiln (LP-RK-1) fabric filter baghouse (LP-BH-2405 – 2408) to ensure structural integrity.
(9 VAC 5-80-110)

10. Owners and operators of all continuous monitoring systems for measuring the opacity shall reduce all data to 6-minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
(9 VAC 5-80-110 and 40 CFR 60.13(h) and Condition 14 of 1/22/03 Permit)

11. The permittee shall keep a copy of the coal purchase agreement which specifies the sulfur content and maximum ash limits for each coal shipment. Each shipment shall be defined as 1,000 tons. Each shipment shall be sampled by 35 incremental, 6 pound samples, to develop a representative sample of the shipment. A final sample shall be drawn from the mass.
(9 VAC 5-80-110 and Condition 36 of 1/22/03 Permit)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Monthly and annual production of lime, in tons. The annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.

2. The number of hours of operation of the lime kiln recorded monthly.

3. The monthly and annual consumption of limestone, in tons. Monthly consumption shall be calculated from records of the feed rate measuring device. The annual consumption shall be calculated monthly as the sum of each consecutive 12 month period.

4. Coal shipments purchased, indicating sulfur and ash content per shipment.

5. The monthly and annual throughput of coal, in tons. The annual consumption shall be calculated monthly as the sum of each consecutive 12 month period.

6. The monthly and annual throughput of natural gas, in million cubic feet. The annual consumption shall be calculated monthly as the sum of each consecutive 12 month period.

7. The monthly and annual throughput of distillate oil, in gallons. The annual consumption shall be calculated monthly as the sum of the consecutive 12 month period.

8. All fuel supplier certifications.

9. Quarterly Excess Emissions COMS opacity data from the lime kiln stack (LP-EP-1) in accordance with 40 CFR 60.7(c).

10. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative in accordance with 40 CFR 60, Subpart A.

11. Results of all performance tests and visible emissions evaluations.

12. Weekly fabric filter inspection results including:

    a. The date, time, and name of person performing each inspection;

    b. The pressure drop across the fabric filters;

    c. Whether or not there were visible emissions; and

    d. Any maintenance or repairs performed as a result of these inspections.

13. Annual fabric filter inspection results including:

    a. The date, time, and name of person performing each inspection;

    b. A list of items inspected; and

    c. Any maintenance or repairs performed as a result of these inspections.

14. Daily wet suppression spray systems results including:

    a. The date, time, and name of person performing each inspection;

    b. A list of items inspected;

    c. The pressure gauge reading; and

    d. Any maintenance or repairs performed as a result of these inspections.

15. Daily checks of the zero and span calibration drifts of the COMS.

16. Weekly visible emissions inspection results for the equipment not controlled by baghouse including:

    a. The date, time, and name of person performing each inspection;

    b. Whether or not there were visible emissions;

    c. Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs; and

    d. VEE and stack test results.

17. Scheduled and unscheduled maintenance, and operator training.

18. Emission factors and calculations used to demonstrate compliance with Condition IV.A.18.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR 60.7 (b) and (c), 40 CFR 60.13 (h) and Conditions 10, 14 and 36 of 1/22/03 Permit)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110 and 9 VAC 5-50-30 and Condition 29 of 1/22/03 Permit)

2. The permitted facility shall conduct a performance test for PM, PM-10, NO_x, SO_2 and CO from the rotary lime kiln stack (LP-EP-1) using the reference methods specified in Condition IV.D.3. to demonstrate compliance with the emission limits contained in Condition IV.A.18. The tests shall be performed within 180 days of the issuance of this permit. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the applicable reference methods contained in 40 CFR Part 60, Appendix A. The details of the test are to be arranged with the Director, Valley Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 45 days after test completion and shall conform to the test report format enclosed with this permit.
   (9 VAC 5-80-110)

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17, 201a
Visible Emission	EPA Method 9
NO_x	EPA Methods 7, 7E
SO_2	EPA Methods 6, 19
CO	EPA Methods 10, 6C

(9 VAC 5-80-110)

E. Reporting

1. The permittee shall submit quarterly Excess Emissions Reports which shall include all six-minute periods during which the average opacity of the visible emissions from the rotary lime kiln (LP-RK-1) is greater than 15%. Reports shall follow the format provided in 40 CFR 60.7(c) and shall be submitted to the Director, Valley Regional Office, and one copy shall be submitted to:

   Associate Director
   Air Enforcement Branch (3AP10)
   U. S. Environmental Protection Agency
   Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

   (9 VAC 5-80-110, 40 CFR 60.343(e), 40 CFR 60.7(c), 40 CFR 60.19(d) and Condition 37 of 1/22/03 Permit)

V. Process Equipment Requirements – Lime Finishing and Loadout Process

A. Limitations

1. Particulate emissions from loading the two lime storage silos (LP-SB-1 EAST & WEST) shall be controlled by a baghouse (LP-DC-2525). The baghouse shall be provided with adequate access for inspection and shall be in operation when the silos are operating.

   (9 VAC 5-80-110 and Condition 16 of 1/22/03 Permit)

2. Particulate emissions from unloading of the two lime storage silos (LP-SB-1 EAST & WEST) shall be controlled by covered conveyors and baghouses (LL-DC-2532 and LP-DC-2341). The baghouses shall be provided with adequate access for inspection and shall be in operation when the silos are operating.

   (9 VAC 5-80-110 and Condition 17 of 1/22/03 Permit)

3. Particulate emissions from the belt conveyors (LS-CB-1, 2 and 3), storage bins (LS-SS-2, 3, 4 and 5) and screen (LS-S) shall be controlled by a fabric filter baghouse (LS-DC-1). The baghouse shall be provided with adequate access for inspection and shall be in operation when the lime finishing and loadout process is operating.

   (9 VAC 5-80-110 and Condition 18 of 1/22/03 Permit)

4. Particulate emissions from belt conveyors (LS-CB-4, 5, 6 and 7), storage bins (LS-SS-1 and 6), screw conveyor (SC-2) and loadout dust controlling spouts (LS-1, 2 and 3) shall be controlled by a fabric filter baghouse (LS-DC-2). The baghouse shall be provided with adequate access for inspection and shall be in operation when the equipment is operating.
   (9 VAC 5-80-110 and Condition 19 of 1/22/03 Permit)

5. Particulate emissions from the Jeffery Crusher (LS-C) which is included in the lime finishing and loadout process shall be controlled by fabric filter baghouse (LP-DC-2532). The baghouse shall be provided with adequate access for inspection and shall be in operation when the equipment is operating.
   (9 VAC 5-80-110 and Condition 20 of 1/22/03 Permit)

6. Particulate emissions from the kiln dust bin (LP-SB-2) shall be controlled by a fabric filter baghouse (LP-DC-2425). The baghouse shall be provided with adequate access for inspection and shall be in operation when the equipment is operating.
   (9 VAC 5-80-110)

7. Particulate emissions from the lime storage bins (LP-SB-3 NORTH & SOUTH) shall be controlled by appropriate systems which effectively limit the escape of airborne dust.
   (9 VAC 5-80-110 and 9 VAC 5-40-260)

8. Fugitive emission controls shall include the following, or equivalent (as approved by the DEQ), as a minimum:

   a. Dust from drills, shot piles, material handling, bins, screens, crushers, mills, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ).

   b All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

   c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

   d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have clean wheels - achieved by use of a wheel washer **or** equivalent. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   (9 VAC 5-80-110 and Condition 21 of 1/22/03 Permit)

9. The yearly throughput of lime to the two lime storage silos (LP-SB-1 EAST & WEST) shall not exceed 168,000 tons, calculated monthly as the sum of each consecutive 12 month period.
   (9 VAC 5-80-110 and Condition 23 of 1/22/03 Permit)

10. The yearly throughput of lime to the lime finishing and loadout equipment: LS-C, LS-S, LS-CB-1 - 7, LS-SS-1 – 6, SC-2 and LS-1 – 3 shall not exceed 168,000 tons, calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-80-110 and Condition 24 of 1/22/03 Permit)

11. Emissions from the operation of the lime finishing and loadout process equipment (LS-C, LS-S, LS-CB-1 - 7, LS-SS-1 – 6, SC-2 and LS-1 – 3) shall not exceed the limitations specified below:

Particulate Matter	0.022 gr/dscf	0.5 tpy

    The annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-80-110 and Condition 26 of 1/22/03 Permit)

12. Visible emissions from the following baghouses: LP-DC-2525, LP-DC-2532, LP-DC-2341, LS-DC-1 and LS-DC-2 shall not exceed 5 percent opacity as determined using EPA Method 9 (40 CFR 60, Appendix A).

    (9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 27 of 1/22/03 Permit)

13. Visible emissions from any fugitive emission point associated with the lime finishing and loadout process shall not exceed ten percent (10%) opacity, in accordance with 40 CFR, Part 60, Appendix A, Method 9.

    (9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 28 of 1/22/03 Permit)

14. Visible emissions from the fabric filter (LP-DC-2425) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by the EPA Method 9 (Reference 40 CFR 60, Appendix A).

    (9 VAC 5-50-80 and 9 VAC 5-80-110)

15. Visible emissions from the storage silos (LP-SB-3 NORTH & SOUTH) shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A)
    (9 VAC 5-40-1850 and 9 VAC 5-80-110)

16. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9 VAC 5-80-110 and Condition 43 of 1/22/03 Permit)

17. Particulate emissions from each fabric filter stack (LP-DC-2525, LP-DC-2532, LP-DC-2341, LP-DC-2425, LS-DC-1 and LS-DC-2) shall not exceed the process weight limit as determined by the following equation:

$$E = 55.0\ P^{0.11} - 40$$

where:

E = emission rate in lb/hr
P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-260)

B. Monitoring

1. Each fabric filter (LP-DC-2525, LP-DC-2532, LP-DC-2341, LP-DC-2425, LS-DC-1 and LS-DC-2) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filters are operating.
(9 VAC 5-80-110 and Conditions 18, 19 and 20 of 1/22/03 Permit)

2. The permittee shall perform a weekly inspection of each fabric filter **(**LP-DC-2525, LP-DC-2532, LP-DC-2341, LP-DC-2425, LS-DC-1 and LS-DC-2**).** Each inspection shall include an observation of the presence of visible emissions and the pressure drop across each fabric filter. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within four hours such that the fabric filter resumes operation with no visible emissions within 24 hours after the initial observation. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed five percent opacity, the VEE shall be conducted for a total of sixty 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

3. The permittee shall conduct a visible emissions inspection of each piece of equipment not controlled by a baghouse (LP-SB-3 North & South) at least once every week of operation. All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. Each observation period shall be a minimum of 1 minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is taken within two hours of the visible emission inspection such that the equipment operates

with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of sixty 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

4. The permittee shall conduct an annual internal inspection on each fabric filter **(**LP-DC-2525, LP-DC-2532, LP-DC-2341, LP-DC-2425, LS-DC-1 and LS-DC-2) to ensure structural integrity.
(9 VAC 5-80-110)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Weekly visible emissions inspection results for the lime finishing and loadout process equipment including:

   a. The date, time, and name of person performing each inspection;

   b. Whether or not there were visible emissions;

   c. Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs; and

   d. VEE and stack test results.

2. Weekly fabric filter inspection results including:

   a. The date, time, and name of person performing each inspection;

   b. The pressure drop across the fabric filters, if applicable;

   c. Whether or not there were visible emissions; and

   d. Any maintenance or repairs performed as a result of these inspections.

3. All VEE and stack test results.

4. Annual fabric filter inspection results including:

   a. The date, time, and name of person performing each inspection

   b. A list of items inspected; and

   c. Any maintenance or repairs performed as a result of these inspections.

5. Scheduled and unscheduled maintenance, and operator training.

6. The annual throughput of lime, in tons, to the two lime storage silos. The annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.

7. The annual throughput of lime, in tons, processed by the lime finishing and loadout process (LS-C, LS-S, LS-CB-1 - 7, LS-SS-1 – 6, SC-2 and LS-1 – 3), calculated monthly as the sum of each consecutive 12 month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110 and Condition 36 of 1/22/03 Permit)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110 and Condition 29 of 1/22/03 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17, 201a
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

VI. Facility Wide Conditions – Fugitive Dust Sources

A. Limitations

1. Unless otherwise specified, visible emissions from the facility shall not exceed twenty (20) percent opacity except during one six-minute average in any one hour in which visible emissions shall not exceed thirty (30) percent opacity.
(9 VAC 5-80-110 and 9 VAC 5-50-110)

2. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne. Such reasonable precautions may include, but are not limited to the following:

   a. Dust from drills, shot piles, material handling, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ).

   b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

   c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

   d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion;

   e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   (9 VAC 5-80-110 and 9 VAC 5-50-90)

3. In order to minimize the duration and frequency of excess emissions, the permittee shall develop a Dust Control Plan that outlines the preventative measures to be implemented for fugitive dust control at the facility. The plan shall be submitted in writing for approval by the Director, Valley Region, within 90 days of the effective date of this permit and shall include the following as a minimum:

   a. Identification of the personnel responsible for overseeing fugitive dust control;

   b. Description and the frequency of measures to be taken to prevent excess emissions from drills, shot piles, material handling, and load-outs;

c. Description and the frequency of measures to be taken to prevent excess emissions from storage piles and stockpiling operations;

d. Description and the frequency of measures to be taken to prevent fugitive dust from haul roads and other unpaved surfaces;

e. Description and the frequency of measures to be taken to prevent fugitive dust from conveying or transporting materials;

f. Description and the frequency of measures to be taken to prevent deposition of dirt on paved surfaces within the facility and access roads entering the facility.

(9 VAC 5-80-110)

B. Monitoring and Recordkeeping

1. At least once per day, the permittee shall visually survey the trafficable roads at the facility for any sources of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions that leave the facility site boundaries. The presence of excessive fugitive emissions shall require further investigation as to the cause of the emissions and timely corrective action shall be taken within one hour of the visual survey. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water runoff. All observations and corrective actions taken shall be logged and recorded.
(9 VAC 5-80-110)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

   a. A copy of the DEQ approved Dust Control Plan.

   b. Daily logs of the visual survey of the trafficable roads at the facility to include the following:

      (1) The date, time and name of the person performing each inspection;

      (2) Whether or not excessive fugitive emissions are observed and the suspected cause of such emissions; and

      (3) The date, time and type of corrective actions taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Upon request of the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110, 9 VAC 5-50-30 and Condition 29 of 1/22/03 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
Visible Emission	EPA Methods 9 and 22

(9 VAC 5-80-110)

VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720 C)
1	Caterpillar Diesel Generator, Olympian Model CD075	9 VAC 5-80-720 C	NOx, SO2, PM, CO and VOC	0.24 MMBtu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR Part 60, Subpart Y	Standards of Performance for Coal Preparation Plants	Processes less than 200 tons/day [40 CFR 60.250 (a)]
9 VAC 5-40-1980	Particulate Standard for Coal Preparation Plants	Only applies to thermal dryers and pneumatic coal-cleaning equipment.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent with 9 VAC 5-80-80 has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;

      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Region, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Valley Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Valley Region.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
   (9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
   (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted

facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)